Amendments to the Claims:

Status of Claims:

Claims 1-36 and 38-54 are pending for examination.

Claims N/A are amended herein.

Claims 48-54 previously withdrawn are now canceled.

Claim 37 was previously canceled.

Claims 1, 21, 26, 35, 39, 43 are in independent form.

1. (Original) A fluid ejection device comprising:

a first fire line adapted to conduct a first energy signal comprising energy pulses;

a second fire line adapted to conduct a second energy signal comprising energy pulses;

a first address generator configured to provide first address signals;

a second address generator configured to provide second address signals;

first drop generators electrically coupled to the first fire line and configured to respond to the first energy signal to eject fluid based on the first address signals; and

second drop generators electrically coupled to the second fire line and configured to respond to the second energy signal to eject fluid based on the second address signals.

2. (Original) The fluid ejection device of claim 1, wherein the first address signals are valid while the second address signals are invalid and the second address signals are valid while the first address signals are invalid.

3. (Original) The fluid ejection device of claim 1, wherein the first address generator is disposed on a first half portion of the fluid ejection device and the second address generator is disposed on a second half portion of the fluid ejection device, and

wherein the first drop generators are disposed on the first half portion and the second drop generators are disposed on the second half portion.

4. (Original) The fluid ejection device of claim 1, wherein the first address generator is disposed at one end of the fluid ejection device and the second address generator is disposed at the other end of the fluid ejection device.

5. (Original) The fluid ejection device of claim 1, wherein the first address generator is disposed in one corner of the fluid ejection device and the second address generator is disposed in another corner of the fluid ejection device.

6. (Original) The fluid ejection device of claim 1, comprising:

a third fire line adapted to conduct a third energy signal comprising energy pulses;

a fourth fire line adapted to conduct a fourth energy signal comprising energy pulses;

third drop generators electrically coupled to the third fire line and configured to respond to the third energy signal to eject fluid based on the first address signals; and

fourth drop generators electrically coupled to the fourth fire line and configured to respond to the fourth energy signal to eject fluid based on the second address signals.

7. (Original) The fluid ejection device of claim 6, wherein the first and third drop generators are disposed on a first half portion, and the second and fourth drop generators are disposed on a second half portion.

8. (Original) The fluid ejection device of claim 6, comprising:

a fifth fire line adapted to conduct a fifth energy signal comprising energy pulses;

a sixth fire line adapted to conduct a sixth energy signal comprising energy pulses;

fifth drop generators electrically coupled to the fifth fire line and configured to respond to the fifth energy signal to eject fluid based on the first address signals; and

sixth drop generators electrically coupled to the sixth fire line and configured to respond to the sixth energy signal to eject fluid based on the second address signals, and wherein the first, third and fifth drop generators are disposed on a first half portion and the second, fourth and sixth drop generators are disposed on a second half portion.

9. (Original) The fluid ejection device of claim 1, comprising first address lines adapted to conduct the first address signals and second address lines adapted to conduct the second address signals, wherein the first address lines are disposed in one half portion and the second address lines are disposed in a second half portion.

10. (Original) The fluid ejection device of claim 1, comprising:

a fluid feed source having a length, wherein each of the first drop generators is fluidically coupled to the fluid feed source; and

address lines adapted to conduct the first address signals, wherein the first drop generators are configured to respond based on the first address signals provided by the first address lines, wherein the first fire line and the address lines are disposed as non-overlapping metal lines along a portion of the length of the fluid feed source.

11. (Original) The fluid ejection device of claim 1, comprising a fluid feed source, wherein each of the first drop generators and each of the second drop generators is fluidically coupled to the fluid feed source.

12. (Original) The fluid ejection device of claim 1, comprising a fluid feed source, wherein the first drop generators are disposed on opposing sides of the fluid feed source and each of the first drop generators is fluidically coupled to the fluid feed source, and the second drop generators are disposed on opposing sides of the fluid feed source and each of the second drop generators is fluidically coupled to the fluid feed source.

13. (Original) The fluid ejection device of claim 1, comprising a first fluid feed source and a second fluid feed source, wherein each of the first drop generators is fluidically coupled to the first fluid feed source and each of the second drop generators is fluidically coupled to the second fluid feed source.

14. (Original) The fluid ejection device of claim 1, comprising a first fluid feed source and a second fluid feed source, wherein the first drop generators are disposed on opposing sides of the first fluid feed source and each of the first drop generators is fluidically coupled to the first fluid feed source and the second drop generators are disposed on opposing sides of the second fluid feed source and each of the second drop generators is fluidically coupled to the second fluid feed source.

15. (Original) The fluid ejection device of claim 1, comprising:

a first fluid feed source;

a second fluid feed source;

a third fire line adapted to conduct a third energy signal comprising energy pulses;

a fourth fire line adapted to conduct a fourth energy signal comprising energy pulses;

third drop generators electrically coupled to the third fire line and configured to respond to the third energy signal to eject fluid based on the first address signals; and

fourth drop generators electrically coupled to the fourth fire line and configured to respond to the fourth energy signal to eject fluid based on the second address signals, wherein each of the first and second drop generators is fluidically coupled to the first fluid feed source and each of the third and fourth drop generators is fluidically coupled to the second fluid feed source.

16. (Original) The fluid ejection device of claim 15, comprising first address lines adapted to conduct the first address signals and second address lines adapted to conduct the second address signals, wherein the first and third drop generators and the first address lines are disposed on a first half portion and the second and fourth drop generators and the second address lines are disposed on a second half portion.

17. (Original) The fluid ejection device of claim 15, comprising:

a third fluid feed source;

a fifth fire line adapted to conduct a fifth energy signal comprising energy pulses;

a sixth fire line adapted to conduct a sixth energy signal comprising energy pulses;

fifth drop generators electrically coupled to the fifth fire line and configured to respond to the fifth energy signal to eject fluid based on the first address signals; and

sixth drop generators electrically coupled to the sixth fire line and configured to respond to the sixth energy signal to eject fluid based on the second address signals, wherein each of the fifth and sixth drop generators is fluidically coupled to the third fluid feed source.

18. (Original) The fluid ejection device of claim 17, comprising first address lines adapted to conduct the first address signals and second address lines adapted to conduct the second address signals, wherein the first, third and fifth drop

generators and the first address lines are disposed on a first half portion and the second, fourth and sixth drop generators and the second address lines are disposed on a second half portion.

19. (Original) The fluid ejection device of claim 1, comprising:

data lines adapted to conduct data signals representing an image, wherein the first drop generators are configured to respond to the first energy signal to eject fluid based on the data signals and the second drop generators are configured to respond to the second energy signal to eject fluid based on the data signals.

20. (Original) The fluid ejection device of claim 19, wherein the first drop generators are divided into data line groups of drop generators, wherein the first drop generators in each of the data line groups of drop generators are configured to respond to the first energy signal based on the data signals received on one of the data lines.

21. (Original) A fluid ejection device, comprising:

a first fire line adapted to conduct a first energy signal comprising energy pulses;

a second fire line adapted to conduct a second energy signal comprising energy pulses;

means for generating first address signals;

means for generating second address signals;

means for responding to the first energy signal to eject fluid based on the first address signals; and

means for responding to the second energy signal to eject fluid based on the second address signals.

22. (Original) The fluid ejection device of claim 21, wherein the first address signals are valid while the second address signals are invalid and the second address signals are valid while the first address signals are invalid.

23. (Original) The fluid ejection device of claim 21, wherein the means for generating first address signals is disposed on a first half of the fluid ejection device and the means for generating second address signals is disposed on a second half of the fluid ejection device.

24. (Original) The fluid ejection device of claim 21, wherein the means for generating first address signals is disposed in one corner of the fluid ejection device and the means for generating second address signals is disposed in another corner of the fluid ejection device.

25. (Original) The fluid ejection device of claim 21, comprising means for supplying the first address signals to the means for responding to the first energy signal and means for supplying the second address signals to the means for responding to the second energy signal, wherein the means for supplying the first address signals is disposed in a first half portion of the fluid ejection device and the means for supplying the second address signals is disposed in a second half portion of the fluid ejection device.

26. (Original) A method of operating a fluid ejection device comprising:

generating first address signals in the fluid ejection device;

generating second address signals in the fluid ejection device;

receiving a first energy signal comprising energy pulses on a first fire line;

receiving a second energy signal comprising energy pulses on a second fire line;

responding to the first energy signal to eject fluid based on the first address signals; and

responding to the second energy signal to eject fluid based on the second address signals.

27. (Original) The method of claim 26, comprising:

receiving the first energy signal at each of first drop generators;

receiving the second energy signal at each of second drop generators;

activating the first drop generators based on the first address signals; and

activating the second drop generators based on the second address signals.

28. (Original) The method of claim 26, comprising:

supplying valid first address signals while the second address signals are invalid; and

supplying valid second address signals while the first address signals are invalid.

29. (Original) The method of claim 26, comprising:

receiving a third energy signal comprising energy pulses on a third fire line;

receiving a fourth energy signal comprising energy pulses on a fourth fire line;

responding to the third energy signal to eject fluid based on the first address signals; and

responding to the fourth energy signal to eject fluid based on the second address signals.

30. (Original) The method of claim 29, comprising:

receiving a fifth energy signal comprising energy pulses on a fifth fire line;

receiving a sixth energy signal comprising energy pulses on a sixth fire line;

responding to the fifth energy signal to eject fluid based on the first address signals; and

responding to the sixth energy signal to eject fluid based on the second address signals.

31. (Original) The method of claim 26, comprising:

receiving data signals representing an image on data lines;

responding to the first energy signal to eject fluid based on the data signals; and

responding to the second energy signal to eject fluid based on the data signals.

32. (Original) The method of claim 31, wherein the first and second drop generators are divided into data line groups of drop generators, the method comprising activating the first and second drop generators in each of the data line groups of drop generators based on the data signals on a corresponding data line.

33. (Original) The method of claim 26, comprising distributing the first energy signal to the drop generators with an energy variation of less than 20% between any two of the first drop generators.

34. (Original) The method of claim 26, comprising distributing the first energy signal to the drop generators with an energy variation of up to 10% to 15% between any two of the first drop generators.

35. (Previously Presented) A fluid ejection device comprising:

a first fire line to conduct a first energy signal comprising energy pulses;

a first source of address signals configured to provide first address signals;

first resistors electrically coupled to the first fire line and configured to respond to the first energy signal to cause fluid to be ejected fluid based on the first address signals, wherein the first source of address signals and the first resistors are positioned on a first portion of the fluid ejection device; and

a second source of address signals configured to provide second address signals, where the second source of address signals is positioned on a second portion of the

fluid ejection device to supply address signals to resistors on the second portion of the fluid ejection device.

36. (Previously Presented) The fluid ejection device of claim 35, comprising:

a second fire line adapted to conduct a second energy signal comprising energy pulses; and

second resistors electrically coupled to the second fire line and configured to respond to the second pulses to cause fluid to be ejected based on the first address signals, wherein the first source of address signals and the second resistors are positioned on the first portion of the fluid ejection device.

37. (Cancelled)

38. (Previously Presented) The fluid ejection device of claim 35, comprising:

a second fire line adapted to conduct a second energy signal comprising energy pulses; and

second resistors electrically coupled to the second fire line and configured to respond to the second pulses to eject fluid based on the second address signals, wherein the second source of address signals and the second resistors are positioned on the second portion of the fluid ejection device.

39. (Original) A fluid ejection device comprising:

a first source of first address signals;

a second source of second address signals;

first address lines configured to conduct the first address signals;

second address lines configured to conduct the second address signals;

first resistors electrically coupled to the first address lines, the first resistors configured to cause fluid to be ejected based on the first address signals; and

second resistors electrically coupled to the second address lines, the first resistors configured to cause fluid to be ejected based on the first address signals; and

wherein the first address generator and the first resistors are located on first portion of the fluid ejection device and the second address generator and the second resistors are located on a second portion of the fluid ejection device.

40. (Original) The fluid ejection device of claim 39, wherein the first address lines are disposed in only the first portion and the second address lines are disposed in only the second portion.

41. (Original) The fluid ejection device of claim 39, wherein the first address lines and the first fire line are disposed in only the first portion and the second address lines and the second fire line are disposed in only the second portion.

42. (Original) The fluid ejection device of claim 39, comprising:

a fluid feed source having a length, wherein the first fire line and the first address lines are disposed as non-overlapping metal lines along a portion of the length of the fluid feed source.

43. (Original) A method for operating a fluid ejection device that comprises a first group of resistors that each cause fluid to be ejected from a corresponding opening and a second group of resistors that cause fluid to be ejected from a corresponding opening, the first group of resistors being disposed on a first portion of the fluid ejection device and the second resistors being disposed on a second portion of the fluid ejection device, the method comprising:

generating first address signals at a first source;

generating second address signals at a second source different than the first source:

providing the first address signals to the first group of resistors; and

providing the second address signals to the second group of resistors.

44. (Original) The method of claim 43, further comprising providing first energy pulses on a first line that is coupled to the first group of resistors and providing second energy pulses on a second line coupled to the second group of resistors.

45. (Original) The method of claim 44, wherein providing the first energy pulses comprises distributing the first energy pulses to the first group of resistors with an energy variation of less than 20% between an energy provided to any two resistors of the first group.

46. (Original) The method of claim 44, wherein providing the first energy pulses comprises to distributing the first energy pulses to the first group of resistors of up to 10% to 15% variation between an energy provided to any two resistors of the first group.

47. (Original) The method of claim 43, further comprising providing a synchronization signal to both the first and second source of address signals.

48. – 54. (Canceled)